Claims:

1. A method for determining a position, in particular a future position, of an object, in particular of a particle or the like, comprising:

determining a progression of the position of a reference object passing through a process;

forming differences of positions between the object and the reference object;

forming error position terms from the differences; and

weighting the error position terms with at least one correction factor.

2. The method according to claim 1, wherein the error position terms weighted with the correction factor are added up.

3. The method according to claim 2, wherein the correction factor is calculated by an adjoint process.

4. The method according to claim 3, wherein the adjoint process, as a function of time, runs in the direction opposite to the process of the reference object.

5. The method according to claim 4, wherein the weighted and summed error position terms are added to the position of the reference object in order to determine the position of the object.